

A New Era of Hope

*the Vision for
Creative Economy
and People's
Happiness*

with Science Technology and ICT



Ministry of Science, ICT and
Future Planning

Ministry of Science, ICT and Future Planning
47, Gwanmun-ro, Gwacheon-si, Gyeonggi-do, 427-700, Republic of Korea
TEL +82-2-1335 | www.msip.go.kr



Ministry of Science, ICT and
Future Planning

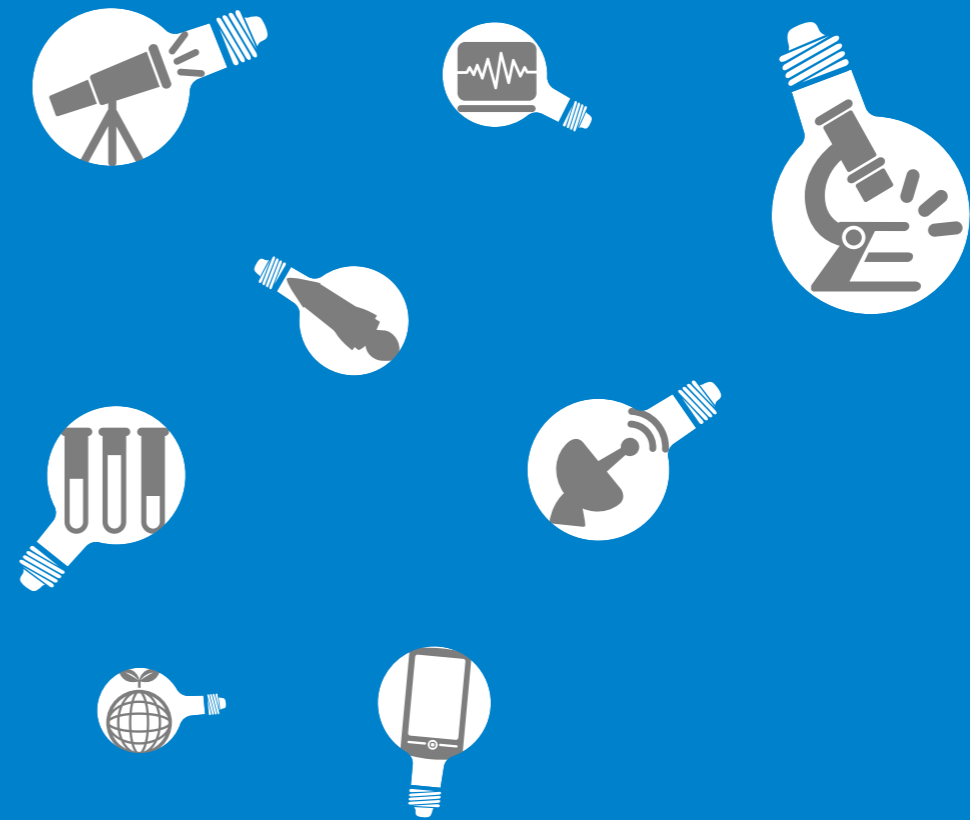
“At the very heart of a creative economy lie science technology and the IT industry, areas that I have earmarked as key priorities.”

I will raise our science and technology to world-class levels. And a creative economy will be brought to fruition by applying the results of such endeavors across the board.

Creative activities across wide-ranging genres will be supported, while the content industry which merges culture with advanced technology will be nurtured. In so doing, we will ignite the engine of a creative economy and create new jobs.

February 25, 2013

President Park Guen-hye
From the Presidential Inaugural Address



*the Vision for
Creative Economy
and People's
Happiness*

with Science Technology and ICT

*“Making Differences toward
a Delightful Korea”*

The Ministry of Science, ICT and Future Planning will open a New Era of Hope

In the midst of a stagnant world economy, the conventional economic strategy has reached its limitations for achieving job creation and continuous economic growth. Now, the Ministry of Science, ICT and Future Planning (MSIP) will take the lead in opening a new era of hope where all people become the main players in the era of creative economy as we generate new markets and jobs through science technology and ICT.



Contents

04	Prologue	16	Promoting International Cooperation and Globalization
06	Greetings from the Minister	18	S&T and ICT for the People
08	Vision & Strategies	20	Epilogue
10	Building Creative Economy Ecosystem	22	Organization
12	Strengthening National R&D and Innovation Capacity	24	Related Organizations
14	Promoting SW and Content Industries as the Core of our Economy		

“Along with the people, we will lay down a foundation for a brighter and better future for creative economy in the Republic of Korea in the 21st century.”



“MSIP has the mandate of translating people’s endless imagination and creativity into creative assets through the use of science technology and ICT, thereby creating new added values, jobs and growth engines vital for the country’s growth.”

The mission of MSIP is to carve out a bright future for the Republic of Korea and open a new era of creative economy.

MSIP has the mandate of translating people’s endless imagination and creativity into creative assets through the use of science technology and ICT, thereby creating new added values, jobs and growth engines vital for the country’s growth.

MSIP dreams of the world where people’s daily lives are enriched and enlightened as we realize the vision of happiness for all the people.

To this end, we will push forward the following strategies:

- creating a start-up ecosystem and new industries,
- strengthening national R&D and innovation capacity,
- making software and content industries the core of our economy,
- globalizing our science technology and ICT, and
- opening an era of happiness for all through science technology and ICT

*Realizing the vision of creative economy and happiness
for all the people through science technology and ICT!*

MSIP, along with the people, will lay down a foundation for a brighter and better future for creative economy in the Republic of Korea in the 21st century.

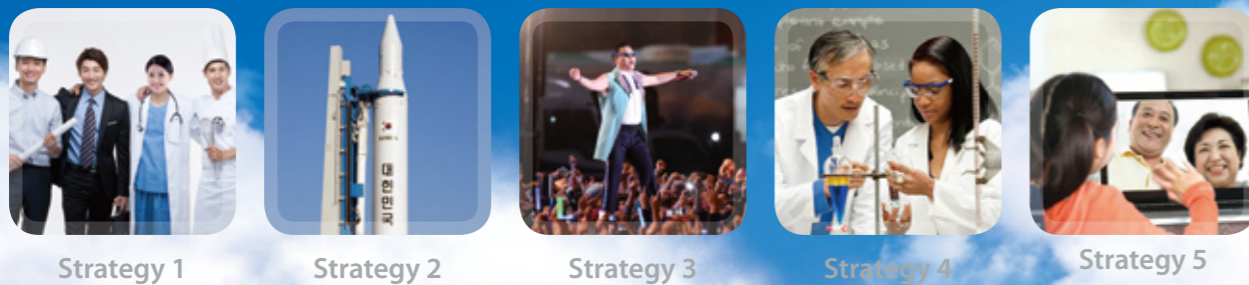
Thank you.

Choi Mun-kee

Minister of Science, ICT and Future Planning

MSIP will realize the Vision of Creative Economy and Happiness for all the People through Science Technology and ICT

Five Strategies of MSIP



- Strategy 1 Establishing Creative Economy Ecosystem
- Strategy 2 Strengthening National R&D and Innovation Capacity
- Strategy 3 Promoting SW and Content industries as the Core of our Economy
- Strategy 4 Promoting International Cooperation and Globalization
- Strategy 5 Developing Science Technology and ICT for the Happiness of the People



MSIP will build a creative economy ecosystem to make Korea a country where creative ideas and people's potential flourish.



MSIP dreams of the world

where anyone with creative ideas can start their own businesses, where new industries and jobs are generated while existing ones are strengthened, and where individual ideas and intellectual properties are fairly rewarded and protected.

01 We will make Korea overflow with creative ideas and talents.

- Spreading "Imagination → Challenge → Start up" movement to a nationwide basis.
- Cultivating interdisciplinary science talents.
- Nurturing ICT professionals.



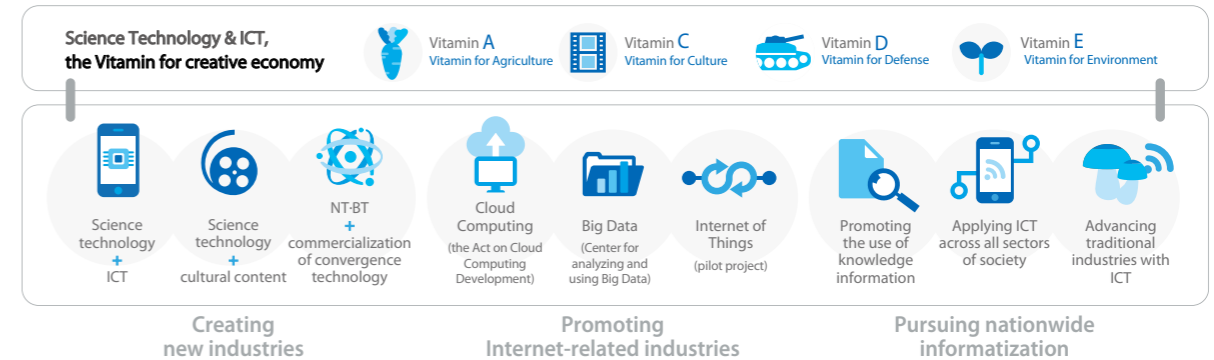
02 We will translate creative ideas into commercial opportunities and start ups.

Strengthening commercialization capacity of university & government-funded research institutes

Supporting commercialization of people's ideas



03 We will generate new industries and high-quality jobs by using science technology and ICT while strengthening existing industries.



04 Help local industries thrive by forming a research community comprised of industry-academia-research institutes.

- Developing local-specific industries.
- Nurturing local industry specialists.
- Building start-up ecosystem infrastructure.
- Strengthening the role of local communities.



05 Ensure intellectual properties to be properly created, protected and used.

- Creating high value-added intellectual properties.
- Advancing the intellectual property protection system.
- Maximizing the use of intellectual property and fairly compensating for the efforts.

MSIP will strengthen national R&D and innovation capacity and create an environment where scientists can actively pursue their research.



MSIP dreams of the world

where scientists are encouraged by investment in core technologies of the future such as BT, NT, and ET
 where Korea emerges as a space powerhouse and dreams for exploring the moon,
 where a stable research environment creates favorable conditions for scientists, and
 where youngsters aspiring to become scientists can dream for the impossible.

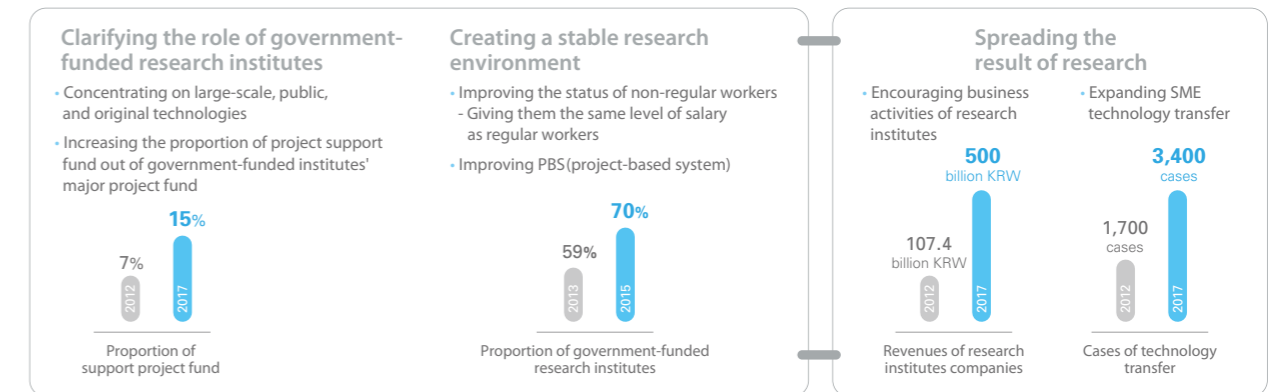
01 We will strengthen basic fundamentals of creative R&D.



02 Promoting growth engines in the promising areas through careful selective concentration

- Actively developing core technologies of the future such as stem cell, brain research, nano materials, and clean energy.
- Realizing the dream of a space powerhouse by developing independent technology.
- Advancing nuclear power technology to the world's top level by exporting nuclear power technology and securing radiation medical technology that can treat incurable cancers.

03 Nurturing government-funded research institutes to the world's best research institutes.



04 We will create a society where scientists can freely engage in their research activities.

- Raising the reception rate of science technology pension fund to the level of private school's pension scheme (82% as of 2013).
- Devising a law that gives sufficient support and courtesy to the patriots and veterans in the field of science technology.
- Promoting and supporting a cooperative association for scientists to provide jobs for scientists with career interruption, unemployment, or long experience.
- Nurturing female scientists by educating women talents in the field of science and technology while supporting female scientists to accumulate R&D career.
- Managing help centers for retired scientists to help the retired scientists to reenter into the job market and actively engage in domestic as well as international voluntary activities.

MSIP will develop software and content industry as the core of our economy so that 1+1 ends up being more than two and generates an infinite flow of energies.



MSIP dreams of the world

where anyone can easily enjoy learning software, the language of the 21st century, where anyone can create their own content with creativity and imagination, where there is a wide way opened for such individual content to be sold in the global market, and where the possibilities for smart technologies and ideas overflow.

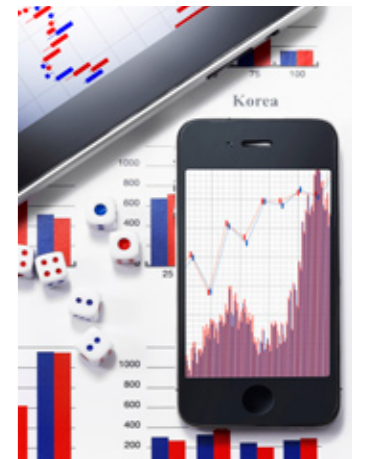
01 We will foster SW, the language of the 21st century.

- Developing SW education programs for elementary and middle schools, and enhancing college/corporate SW education to meet business requirements.
- Establishing SW policy institutes to lead SW research.
- Developing SW core technologies to lead the future of SW global market.
- Building SW Convergence Cluster for job creation and advancing local-specific industries by SW convergence.
- Establishing fair business practices within the SW industry by leading the “pay full price for SW” campaign starting from the government and stepping up crackdowns on illegal SW copies.



02 We will go global with Korean-style content.

- Raising a fund dedicated to cultivate Korean-style content.
- Establishing a content bank to promote the sharing of original sources for content production.
- Implementing a ‘shared-growth’ project to encourage SMEs’ involvement in content production market.



03 We will remove regulatory barriers among media industries and nurture new convergence service.

- Invigorating the broadcasting market by enhancing the content competitiveness of SMEs and improving regulations on technology convergence services.
- Leading the development of next-generation broadcasting technologies and developing global leadership in state-of-the-art broadcasting service.
- Producing two-way/customized content to nurture smart media and the advertising industry.

04 We will create a world-class network that provides fertile ground for the C-P-N-D ecosystem.

The onset of the Era of Nationwide Giga Internet

10.4% of the whole nation

2012

90%

2017

1 Giga internet to cover 90% of Korea by 2017

Download time for a DVD-scale film

100 seconds for 0.1 Giga

1 second for 10 Giga

the world's first-ever 10 Giga internet service

- Technology development by 2013, pilot service by 2014

Expansion of free WiFi zones

2,000 places

2012

10,000 places

2017

1 Giga internet to cover 90% of the country by 2017

Establishment of the environment for NG mobile communications

- Developing wireless technology offering speed 40 times faster than LTE

- Auctioning 1.8 / 2.6 GHz spectrum for LTE service

MSIP will strengthen international cooperation and build the world-class research environment to nurture youngsters to be global leaders.



MSIP dreams of the world

where the world's best scientists find Korea as the most research-friendly country, where active connections between researchers and businesses generate flourishing successes in basic science, where there are more and more global research leaders who can grow to be Nobel laureates, and where Korea proudly emerges as the world's best science powerhouse.

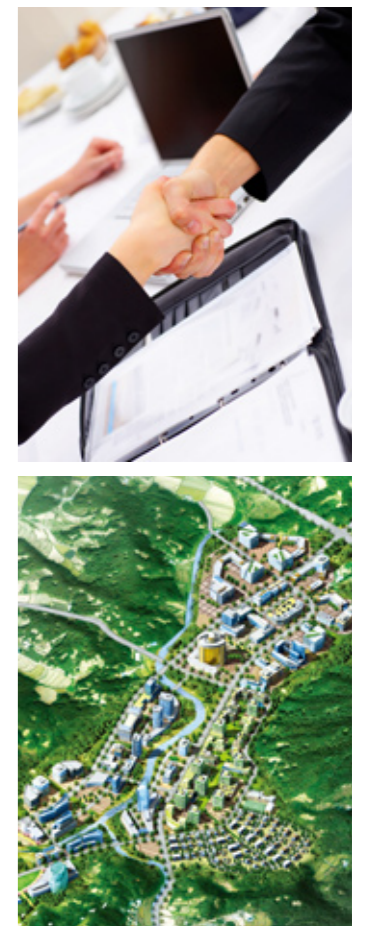
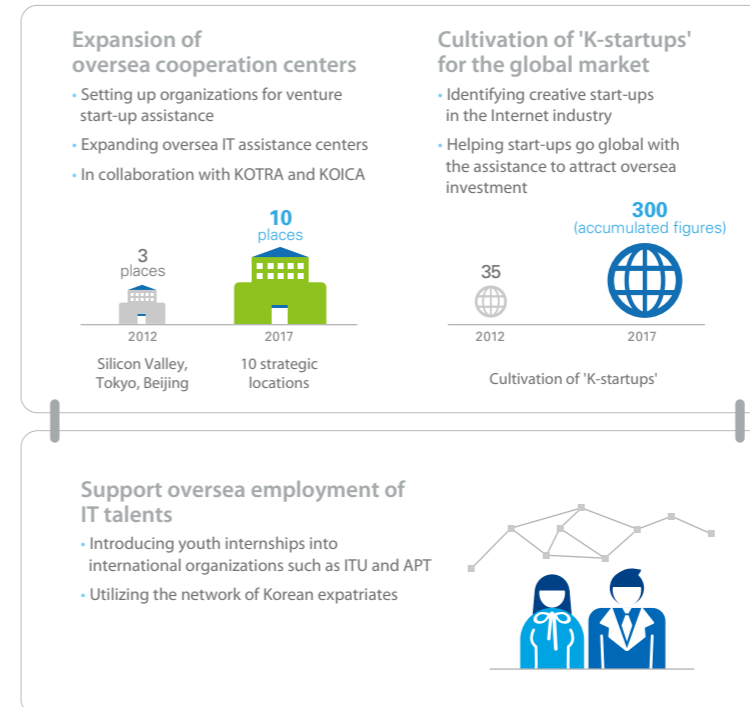
01 We will secure Korea's leadership at the international stage.

- Promoting international joint R&D on strategic areas and leading global ICT governance for a strategic global cooperation.
- Carrying out ST/ICT-led Korean Wave projects.

02 We will cultivate International Science Business Belt as a global hub for basic science research.

- Attracting the world's top 300 scientists and nurturing global research leaders who can grow to be Nobel laureates.
- Creating a world-class, foreigner-friendly environment for international researchers to live in and indulge themselves into creative research.
- Transforming the outcomes of basic science into business opportunities by raising a fund for science business.

03 We will embrace the global market from the very beginning for the spread of 'K-Move'.



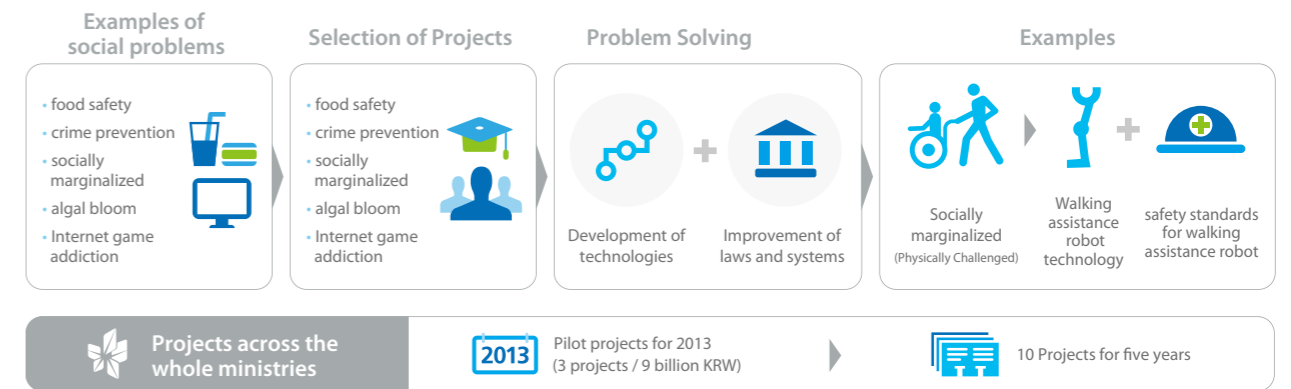
MSIP will promote the development of science technology and ICT in a way that all those science technologies contribute to our sole objective, the enhancement of people's happiness.



MSIP dreams of the world

where any people regardless of their age and gender can safely and conveniently use ICT, where chronic social problems are efficiently addressed through advanced science and technology, where every merchant and business can thrive together through postal service network, and where the people's happiness is all the more enhanced with the advancement of science and technology.

01 We will implement projects that address social problems by utilizing state-of-the-art science technologies.



02 We will lower telecommunications tariffs for households.

- Encouraging the use of MVNOs (Mobile Virtual Network Operators) and eliminating membership fees for mobile phones step by step.
- Making distribution system of handset devices more transparent and spreading the tariff system specially designed for elderly and disabled.
- Expanding choices available to consumers by pursuing the permission of mobile Internet phones to all smart phone tariff system.



03 We will create a safe and convenient Internet environment.

- Expanding ICT infrastructures and establishing prevention and response system against national cyber threats.
- Spreading next-generation global web standards (html5) and building an open global environment.
- Consolidating cyber ethics and bridging the digital divide with socially marginalized.



04 We will contribute to realizing the vision of people's happiness through postal service.

- Implementing various administrative services by using postal network.
- Supporting small merchants and businesses and farmers through post office shopping mall's direct transaction service.
- Increasing venture capital funds of post office financing so that creative enterprises can thrive.
- Securing enough postmen for new towns and promoting part-time postmen to permanent employees.

MSIP will make the Republic of Korea a country where every single individual enjoys a happy life

MSIP strives for the world where

Ordinary youngsters grow to be global leaders, struggling job seekers emerge as venture CEOs,

Game enthusiasts become game developers, discouraged researchers are encouraged to reach their full potential as global scientists,

notorious hackers turn into promising vaccine developers, senior citizens who used to worry about their life after retirement find new opportunities as mentors,

and people from all walks of life can thrive and find genuine happiness.



Minister of Science, ICT and Future Planning

Policy Advisor to the Minister

Creative Economy Policy Bureau

Spokesperson

Inspector General

- Creative Economy Planning Division
- Creative Economy Foundation Division
- Convergence Planning Division

- Public Relations Division

- Audit and Inspection Division

Vice Minister I of Science, ICT and Future Planning

↳ General Services Division

Office of Planning and Coordination

• Policy Planning Bureau

- ↳ Planning and Finance Division
- ↳ Administrative Management Division
- ↳ Regulatory Reform and Legal Affairs Division
- ↳ Informatization Management Division

• International Cooperation Bureau

- ↳ Science and Technology Cooperation Division
- ↳ ICT and Broadcasting Cooperation Division
- ↳ International Organization Cooperation Division

• Emergency and Security Planning Division

Office of Future Leading R&D Policy

• R&D Policy Bureau

- ↳ R&D Policy Division
- ↳ Basic Research Promotion Division
- ↳ Fundamental Research Division
- ↳ Future Technology Division
- ↳ Fusion R&D Support Division

• Research Community Policy Bureau

- ↳ Research Community Support Division
- ↳ International Science Business Belt Division
- ↳ R&D Based Innovative Clusters Division

• Space & Nuclear Policy Bureau

- ↳ Space Policy Division
- ↳ Space Technology Division
- ↳ Nuclear Technology Division
- ↳ Space & Nuclear Cooperation Division

Deputy Minister for Science & Technology Coordination

Science and Technology Policy Bureau

- ↳ Science and Technology Policy Division
- ↳ Science and Technology Strategy Division
- ↳ Policy Coordination Support Division
- ↳ R&D Planning Division

• Science and Technology HR Bureau

- ↳ Science and Technology HR Policy Division
- ↳ Science and Technology HR Development Division
- ↳ Science and Technology HR Support Division
- ↳ Research Environment Safety Division

R&D Coordination Bureau

• Deputy Director-General

- ↳ R&D Coordination Division
- ↳ Big Science & Energy R&D Division
- ↳ Future Growth R&D Division
- ↳ Life & Welfare R&D Division

Performance Evaluation Bureau

- ↳ Performance Evaluation Policy Division
- ↳ Performance Information Management Division
- ↳ Research System Division

Vice Minister II of Science, ICT and Future Planning

Office of Broadcasting and Communications Convergence Policy

• Convergence Policy Bureau

- ↳ Policy Coordination Division
- ↳ Information & Communications Technology Policy Division
- ↳ Broadcasting Communications Infrastructure Division
- ↳ Broadcasting, Communications and Content Division

• Broadcasting Promotion Policy Bureau

- ↳ Broadcasting Industry Policy Division
- ↳ New Media Policy Division
- ↳ Digital Broadcasting Policy Division

• Radio Policy Bureau

- ↳ Radio Policy Planning Division
- ↳ Radio and Broadcasting Management Division
- ↳ Spectrum Policy Division

IT Strategy Bureau

- ↳ IT Strategy Planning Division
- ↳ Cyber Security Policy Division
- ↳ Smart Network & Communications Policy Division

• Internet Policy Bureau

- ↳ Network Policy Division
- ↳ Internet Policy Division
- ↳ Information Culture Division

ICT Industry Bureau

- ↳ ICT Policy Division
- ↳ ICT Industry Division
- ↳ Software Industry Division
- ↳ Software Convergence Division

Telecommunications Policy Bureau

- ↳ Telecommunications Policy Planning Division
- ↳ Telecommunications Competition Policy Division
- ↳ Telecommunications Service Policy Division
- ↳ Telecommunications Infrastructure Policy Division

Related Institutions

- National Radio Research Agency
- Central Radio Management Office
- Korea post
- National Science Museum
- Gwacheon National Science Museum

Separate Organizations

- Office of Intellectual Strategy and Planning(PCIP)
- Construction Office of DGIST and Science Museum
- ITU PP-14 Preparatory Secretariat
- DTV Transition Promotion Group

Related Institutions

• National Radio Research Agency	+82-2-710-6555
• Central Radio Management Office	+82-2-3400-2000
• Korea Post	+82-2-2195-1114
• National Science Museum	+82-42-601-7894
• Gwacheon National Science Museum	+82-2-3677-1500

Affiliate Organizations

• Korea Institute for Advanced Study	+82-2-958-3711
• Gwangju Institute of Science and Technology	+82-62-715-2114
• National Security Research Institute	+82-42-870-2114
• National Institute for Mathematical Sciences	+82-42-864-5700
• National Fusion Research Institute	+82-42-879-6000
• Institute for Basic Science	+82-42-8788-114
• Korea Research Council of Fundamental Science Technology	+82-2-574-7142
• Green Technology Center	+82-2-958-4960
• Daegu Gyeongbuk Institute of Science & Technology	+82-53-785-0114
• Specific Post Office Pension Service Agency	+82-2-3278-7700
• Korea Research Council for Industrial Science and Technology	+82-2-576-2361
• World Institute of Kimchi	+82-62-610-1700
• Korea Institute of Toxicology	+82-42-610-8250
• Korea Institute of R&D Human Resource Development	+82-42-820-5600
• The Innopolis	+82-42-865-8800
• Postal Savings & Insurance Development Institute	+82-2-2639-0500
• Korea Postal Logistics Agency	+82-2-2204-1404
• Postal Facility Management Agency	+82-2-3706-1110
• Korea Institute of Materials Science	+82-55-280-3000
• National IT Industry Promotion Agency	+82-2-2141-5000
• Korea Institute of Construction Technology	+82-31-910-0114
• Korea Institute of Science & Technology Evaluation and Planning	+82-2-589-2200
• Korea Institute of Science and Technology	+82-2-958-5114
• Korea Advanced Institute of Science and Technology	+82-42-350-2114
• Korea Institute of Science and Technology Information	+82-42-869-1004

• The Korea Foundation for the Advancement of Science and Creativity	+82-2-555-0701
• Korea Institute of Machinery & Materials	+82-42-861-7401
• Korea Basic Science Institute	+82-42-865-3500
• Korea Brain Research Institute	+82-53-428-1840
• Korea Communications Agency	+82-2-2142-2114
• Korea Research Institute of Bioscience and Biotechnology	+82-42-860-4114
• Korea Institute of Industrial Technology	+82-41-589-8114
• Korea Food Research Institute	+82-31-780-9114
• Korea Institute of Energy Research	+82-42-860-3114
• National Research Foundation of Korea	+82-42-869-6114
• Korea Postal Service Agency	+82-2-3443-1352
• Korea Atomic Energy Research Institute	+82-42-868-2000
• Korea Institute of Radiological & Medical Sciences	+82-2-970-2114
• Korea Internet Security Agency	+82-2-405-5118
• Korea Electrotechnology Research Institute	+82-55-280-1114
• Electronics and Telecommunications Research Institute	+82-42-860-6114
• National Information Society Agency	+82-2-2131-0114
• Korea Institute of Geoscience and Mineral Resources	+82-42-868-3114
• Korea Astronomy and Space Science Institute	+82-42-865-3332
• Korea Railroad Research Institute	+82-31-460-5000
• Korea Research Institute of Standards and Science	+82-42-868-5114
• Korea Institute of Oriental Medicine	+82-42-861-1994
• Korea Aerospace Research Institute	+82-42-860-2114
• Korea Research Institute of Chemical Technology	+82-42-860-7114